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(FILE 'HOME' ENTERED AT 09:40:28 ON 12 OCT 2003)

FILE 'MEDLINE' ENTERED AT 09:40:36 ON 12 OCT 2003

L1 14045 S PAPILLOMAVIRUS  
L2 805 S HPV-6  
L3 0 S FUSION "L1" AND "L2"  
L4 0 S FUSION "L1"  
L5 794 S L1 AND L2  
L6 28 S FUSION AND L2  
L7 522 S FUSION AND L1  
L8 29 S L7 AND HPV6?

ANSWER 4 OF 28 MEDLINE on STN  
AN 1998156125 MEDLINE  
DN 98156125 PubMed ID: 9495021  
TI Production of recombinant virus-like particles from human papillomavirus types 6 and 11, and study of serological reactivities between **HPV** 6, 11, 16 and 45 by ELISA: implications for papillomavirus prevention and detection.  
AU Touze A; Dupuy C; Mahe D; Sizaret P Y; Coursaget P  
CS Laboratoire d'Immunologie des Maladies Infectieuses, Faculte des Sciences Pharmaceutiques Philippe Maupas, Tours, France.  
SO FEMS MICROBIOLOGY LETTERS, (1998 Mar 1) 160 (1) 111-8.  
Journal code: 7705721. ISSN: 0378-1097.  
CY Netherlands  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 199803  
ED Entered STN: 19980407  
Last Updated on STN: 19980407  
Entered Medline: 19980324  
AB The L1 major capsid proteins of human papillomaviruses types 6 and 11 were expressed in insect cells using recombinant baculoviruses. These L1 proteins were shown to self-assemble into virus-like particles resembling papillomavirus virions as previously observed for HPV 16 and 45. However, we observed variations in the yield of virus-like particles among the four genotypes investigated. This suggests that more than one strain of each genotype has to be investigated to obtain the high level of virus-like particle production necessary to develop HPV vaccines or serological tests. Cross-reactivities between **HPV** 6, 11, 16 and 45 were studied using polyclonal and monoclonal antibodies to virus-like particles, L1 proteins and synthetic peptides. Although antisera react strongly against homologous virus-like particles, there is evidence of some cross-reactivity. This could be one of the explanations for the fact that antibodies to one genotype are detected in individuals infected with another genotype. This study also identified a linear epitope recognized by anti-HPV 16 virus-like particle sera.  
CT Check Tags: Animal; Support, Non-U.S. Gov't  
Amino Acid Sequence

20179467 PubMed ID: 10712890

TI Human **papillomavirus** vaccines.

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SO SEMINARS IN CANCER BIOLOGY, (1999 Dec) 9 (6) 431-44. Ref: 102  
Journal code: 9010218. ISSN: 1044-579X.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)  
General Review; (REVIEW)  
(REVIEW, TUTORIAL)

LA English

FS Priority Journals

EM 200004

ED Entered STN: 20000505  
Last Updated on STN: 20000505  
Entered Medline: 20000427

AB Genital human **papillomavirus** (HPV) infections are the viral sexually transmitted diseases most frequently diagnosed that include anogenital condylomas and squamous intra-\$bepithelial lesions, among which the precursors of invasive carcinomas of the uterine cervix. In animal PV models, vaccination against L1 and/or L2 viral capsid proteins provides an efficient protection against infection, involving virus type-specific neutralizing antibodies. Vaccination against non-structural E1, E2, E6 or E7 viral proteins does not prevent infection, unless administered altogether, but tends to stimulate regression, warranting the design of therapeutic vaccines. Prophylactic vaccines based on the use of virus-like particles (VLPs) obtained by auto-assembly of L1 or L1 and L2 proteins produced by recombinant DNA technology are under phase I/II clinical trials for **HPV6/11** associated with condylomas and for **HPV16**, the most frequent oncogenic genotype. Second generation vaccines are chimeric proteins or VLPs incorporating one of the structural proteins (L1 or L2) fused to a non-structural protein (E6, E7 or E2), which should induce both humoral and cellular immunity. Vaccine valency (number of genotypes), route of administration (humoral versus local immunity), vaccinees (children, young adults, gender) and forms of vaccines (recombinant \$lSalmonella typhimurium\*I\$L, edible plants expressing L1 and L2 proteins, DNA vaccines, synthetic antigenic peptides) are under study. End points to evaluate vaccine efficacy in phase III trials should include viral DNA detection and typing, and screening for low or high grade intraepithelial lesions. Therapeutic vaccines based on recombinant HPV E6 and/or E7 vaccinia virus, L2-E7 **fusion** proteins or E7 peptides corresponding to cytotoxic T cell epitopes are currently tested (phase I/II trials) in patients with cervical carcinomas of advanced clinical stages or high grade intraepithelial lesions. Animal studies, phase I/II clinical trials and implementation of the community support that HPV vaccines will constitute an efficient means to prevent carcinoma of the uterine cervix.

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CT Check Tags: Animal; Human  
Cattle  
Clinical Trials  
Disease Models, Animal